

Next to nothing

A study of nanoscientists and their cosmology
at a Swedish research laboratory

av

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Abstract

Next to nothing: A study of nanoscientists and their cosmology at a Swedish research laboratory. By Mikael Johansson. Doctoral dissertation 2008, Social Anthropology, School of Global Studies, University of Gothenburg, Box 700, 405 30 Göteborg, Sweden. ISBN 978-91-628-7395-0.

This study is based on anthropological fieldwork conducted among nanoscientists at the Department of Microtechnology and Nanoscience, Chalmers University of Technology, Gothenburg, Sweden. The aim of the dissertation is to explore cosmological notions among this group of researchers through their conceptualization of nature and self. These cosmological notions are, like all cosmologies, embedded in everyday practices and they are part of people's lifeworlds and deep emotional investments. Of importance is the renunciation of culture within the community of nanoscientists, a renunciation which is best describes as 'a culture of no culture.' A concept which is used to describe the emphasized objectivity in research and how the scientists perceive themselves as free from preconceptions when conducting research.

Nanoscience deals with the exploration of the nanometer level which is the realm of single atoms and molecules. This level of existence is the last level of stable matter and because of the minute size of the objects therein it can be argued that the researchers are experimenting on the level of 'next to nothing'. The term 'next to nothing' also has a social connotation in that the scientists form a community in which its members share a self-image that reduces idiosyncratic and cultural particularities to a 'next to nothing'. For the scientists cultural expressions such as nationality, gender and religion are, in accordance, considered irrelevant for conducting research. For conducting research a 'raw' individual is envisaged who should have as few connections to civil society as possible.

From a perceived common non-cultural scientific stance the researchers conceive of themselves as being in a position from which they can produce universalistic valid knowledge about the world. Culture, from the perspective of the researcher, is associated with markers of a non-scientific 'other' in being an aspect of humanness that ideally is no part of science.

Key Words: Anthropology of science and technology, cosmology, nanoscience, nanotechnology, individualism, technoscape, skills.